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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/618,848

07/18/2000

Yuji Nagatani

FAC-001

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7590

02/22/2005

LAHIVE & COCKFIELD, LLP.
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EXAMINER

MUNOZ, GUILLERMO

ART UNIT

PAPER NUMBER

2637

DATE MAILED: 02/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Office Action Summary</p>	Application No. 09/618,848	Applicant(s) NAGATANI ET AL.	
	Examiner Guillermo Munoz	Art Unit 2637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3,4,5 is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

Applicant's arguments, see amendment, filed 21 September 2004, with respect to the rejection(s) of claim(s) 1-2 under 102(b) have been fully considered and are persuasive.

Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Minuth et al. (US 6,396,282 B1) and Lau (US 5,896,417).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minuth et al. in view of Lau.

Regarding claim 1; Minuth et al. teach a two-wire communication system which has almost all the claimed subject matter of claim 1 as follows. Minuth et al. disclose a plurality of network subscribers (nodes) connected to a two-wire bus, note figure 1 elements 1a-1f. Minuth et al. do not explicitly state the capacitor elements shown in figures 4, and 6 connected to Subscriber Ground (GRD SG) form a low-pass filter, however, the functionality is the same. Minuth further illustrates two terminating resistors at each network subscriber connected to a two-wire bus (RTL and RTH), however, Minuth fails to teach the terminating resistors connected via a low-pass filters to the transmission lines.

Lau teach a similar two-wire network element having two terminating resistors connected to a two-wire transmission line via a low-pass filter, note figure 1.

Therefore, it would have been obvious to one having ordinary skill at the time of the invention to modify Minuth et al.'s terminating resistors with Lau's teaching of placing the low-pass filter between the terminating resistors and the transmission line, since one of ordinary skill in the art would have expected the modification to perform equally well, since Lau suggest in Fig. 1, that placing the terminating resistors downstream of a low-pass filter would produce the same results.

Regarding claim 2; as applied to claim 1, Minuth et al. further teach a terminating resistor supplies a first predetermined potential to one wire and the second terminating resistor supplies a second predetermined potential to the second wire, by the VCC and Ground SG potentials.

Allowable Subject Matter

The following is an examiner's statement of reasons for indicating allowance:

Claim 3 is considered allowable because the present invention comprises a two-wire reception circuit for receiving a transmission signal represented by two AC components having 180° phase difference between the components comprising a low-pass filter, two terminating resistors connected to the bus through the low-pass filter, an AC coupling circuit; a bias circuit, and a clip circuit. The closes prior art, Minuth et al. (US Patent Number 6,396,282 B1) shows a similar circuit including a reception circuit for receiving a differential transmission signal having the characteristics of two AC components being opposite in phase from each other. However, Minuth et al fails to teach the reception circuit comprising a low-pass filter, two terminating

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resistors connected to the bus through the low-pass filter, an AC coupling circuit; a bias circuit, and a clip circuit. This distinct feature has been included in independent claim 3 rendering it allowable.

Claims 4-5 are considered allowable for reasons set forth in Office Action mailed June 21, 2004.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Guillermo Munoz whose telephone number is 571-272-3045. The examiner can normally be reached on Monday-Friday 8:30a.m-4:30p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Guillermo Munoz

GM
February 16, 2005

Jean B. Corriellus
JEAN B. CORRIELUS
PRIMARY EXAMINER
2/17/05